28. *Forest Objection Book and other Advances.*—The amount held under objection outstanding at the close of the year was Rs. 29,075 as against Rs. 36,738 of last year. Steps should be taken to effect adjustments early. The revised rules relating to advances for works should be strictly enforced and prompt action taken for the clearance of advances.

29. The work of the Department during the year was satisfactory.

S. ABDUL WAJID,
General Secretary to Government.
(In charge)

PUBLIC WORKS SECRETARIAT.

Administration of the Electrical Department for the year 1931-32.

READ—

Letter No. 79741, dated the 15th October 1932, from the Chief Electrical Engineer submitting the Administration Report of the Electrical Department for the year 1931-32.

ORDER No. E. D. S. 1167-73, DATED BANGALORE, 4TH FEBRUARY 19 33.

Demand, Collection and Balance.—The gross demand for the year was Rs. 52,63,911 including the previous arrears of Rs. 2,33,303. The collection under "Power" amounted to Rs. 50,33,479. The budget estimate of the Department including Telephones for the year 1931-32 under "Receipts" was Rs. 49·95 lakhs, while the actual receipts amounted to Rs. 50·66 lakhs showing an increase of Rs. 71,000 over the Budget. The arrears at the end of the year stood at Rs. 2,30,432 and of this, a sum of Rs. 1,87,387 due from the Gold Mining Companies and Municipalities is reported to have been since realised. The balance of Rs. 43,045 represents mostly the arrears payable by Government Departments and the Mysore Municipality. The Chief Electrical Engineer is requested to see that arrears are not allowed to accumulate and that prompt action is taken for the recovery of outstandings.

2. *Working Expenditure.*—The working expense under "Power" during the year amounted to Rs. 10,73,718 as against Rs. 11,18,625 in the previous year. The percentage of working expenses to gross receipts works out to 21·33 during the year against 22·18 during 1930-31 and 21·90 in 1929-30. The decrease during the year is due to the several measures of economy adopted, including a general cut in salaries and reduction of staff.

3. *Revenue Returns.*—The net revenue during the year after setting apart the contribution of Rs. 6,50,000 to the Depreciation Fund and of Rs. 43,899 to the Departmental Provident Fund amounted to Rs. 32,05,530 as against Rs. 33,97,862 in the previous year. The decrease in revenue is mainly due to an additional contribution of Rs. 1,60,000 to the "Depreciation Fund" towards the write-off of the capital value of the Metur Power Supply Lines and connected equipment which will have to be dismantled after the expiry of the term of agreement with the Government of Madras.

4. *Capital Outlay.*—The capital outlay under "Power" excluding suspense amounted to Rs. 9,46,753. An expenditure of Rs. 11,633 was incurred on Automatic Telephones. A sum of Rs. 3,97,102 was spent from the Depreciation Fund. The more important of the works completed or under execution during the year were the following:—

(*a*) *Electrification of Towns and Rural Areas.*—The works in connection with the electrification of Hoskote and Mulbagal Towns and of the villages of Mallakachanahally, Mancheganahally, Sonnawadi, Chikamuddenahalli, Kengeri, Manchenahalli and Satnur were taken up during the year and are nearing completion.

During the year, electric service was given to Chikballapur and Dodballapur on the 28th February and 30th March 1932, respectively, and the lighting up of the villages of Bellamburi, Doddikannur, Kannasandra, Mudkapalli, Tayalur and Suggenahalli, Mangapatna, Thittamaranahalli and Attibele, Begur, Kandavara, Siddapuram and Varthur in the Kolar Gold Fields, Kankanhalli and Bangalore Sections was also started.

(*b*) *Power Supply to Salem and Erode from Metur.*—Service to Salem and Erode was started in November 1931.

(*c*) *Power Supply to the New Bangalore Water Works at Thippagondanahalli.*—The new transmission line between Thippagondanahalli and Kankanhalli *via* Closepet was completed and put into service for 2,300 volts, for the present.

(*d*) *Remodelling Mysore Transmission Line.*—This work, undertaken for improving efficiency and avoiding interruptions, made good progress during the year.

(*e*) *Installation of Frequency Changer Sets at Bangalore and Mysore.*—With a view to meet the growing demand for power in Bangalore and Mysore Cities, the installation of these sets has been taken up and the work is making rapid progress.

(*f*) *Jog Falls Survey Scheme.*—A weir at Seethakatte was constructed for purposes of conducting joint gaugings by the Governments of Mysore and Bombay.

5. *Power Generated.*—The total power generated during the year in kilo watt hours was 17,10,45,180 against 16,94,91,060 in the previous year. The cost of generating power was just 1·206 per kilo watt hour against 1·272 pies during 1930-31 and 1·207 during 1929-30.

Power and Lighting Installations.—At the close of the year under review there were 1,763 power installations, including irrigation pumps, and 16,761 lighting installations in service against 1,322 and 15,036 respectively in the previous year. There were, therefore, 441 additions to power installations and 1,725 to lighting installations in the year.

Total Capital Expenditure and Net Revenue.—The total capital expenditure on the combined Hydro-Electric Works to the end of the year was Rs. 704·21 lakhs. The net revenue of Rs. 31,37,452 in the year represented a return of 4·46 per cent.

6. *Rebate.*—The rebate granted to the Gold Mining Companies during the year was £34,784 as against £ 32,817 during 1930-31 and £ 43,575 during 1929-30. The slight increase in the year over that of the previous year was due mostly to the Balaghat Mine having gradually relinquished power from March 1932 and also to the increase in the number of Air Blasts and Rock Bursts.

7. *Stores.*—The value of foreign stores purchased during the year was Rs. 6,43,433 and that of local materials Rs. 3,83,847 against Rs. 6,55,152 and Rs. 5,48,342 respectively during the previous year. It is reported that serviceable materials in stock are being used and that the stores balance was reduced from Rs. 20·61 lakhs to Rs. 18·23 lakhs. The amount locked up in stock is still large and the Chief Electrical Engineer is requested to adopt prompt measures for its reduction.

8. *Laboratory.*—The experimental manufacture of a few low capacity transformers having proved successful, the construction of a hundred transformers for use in distribution service has been taken up. The local production as far as possible of electrical appliances is a problem of the greatest importance and requires the increasing attention of the Department.

9. *Interruptions.*—The number of interruptions, other than by previous arrangement, during the year was 91 as against 243 during 1930-31 and 354 during 1929-30. The reduction was due to the installation of Bird Guards on the several transmission lines.

10. *Pump Irrigation.*—The number of Irrigation Pumping Installations in service at the end of the year was 297 as against 219 in the previous year. It is satisfactory to note that the demand for power for irrigational purposes is increasing.

11. *General.*—Estimates for remodelling and deviating some lines within Bangalore City and for the VIII Installation at Sivasamudram for replacing three old Impulse Turbines and their generators by a 9,000 H. P. Reaction Turbine coupled to an 8,000 E.H.P. Generator were sanctioned in the latter part of the year.

With a view to further popularising the use of power for lighting, irrigation and other purposes, the following measures were sanctioned;—

(*a*) Reduction of the initial deposit by purchasers of irrigation pumps on the hire purchase system from Rs. 200 to Rs. 100.

(*b*) Waiving of minimum charges in the case of Flour Mills in all places except Bangalore and Mysore Cities.

(*c*) A concessional rate of one anna per B.O.T.U. for power used in show rooms.

(*d*) A concessional flat rate of eight annas per light per month in the case of installations of not more than three lights in all places except the Cities of Bangalore and Mysore.

(*e*) Waiving of the guarantee of a minimum return of 12 per cent on capital cost in the case bungalow lights in Bangalore and Mysore when the capital cost does not exceed Rs. 1,000.

12. Government are glad to note that the working of the Department in the year under review was satisfactory.

S. SRINIVASA AIYAR,
Secretary to Government,
Electrical Department.